LN-505/506/507/508/509
LN-515/516/517/518

Homeplug

User Manual

Version 1.0

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1. Safety instructions

All safety and operating instructions should be read and understood before using the device, and should be kept for future reference.

- Never open the Homeplug adapter. There are no user-serviceable parts inside the Homeplug adapter.
- Do not try to service this product yourself! Contact qualified technicians each and every time your device needs maintenance. There is a risk of electric shock!
- Use the Homeplug adapter in a dry location only.
- Do not insert any objects into the openings of the Homeplug adapter.
- To disconnect the Homeplug adapter from the power supply grid, pull the power plug.
- Do not keep the Homeplug adapter in direct sunlight.
- Slots and openings on the case serve as ventilation. Never block or cover them.
- Never set up the Homeplug adapter near a heater or radiator.
- The Homeplug adapter should be located only where sufficient ventilation according to the instructions of the manufacturer can be ensured.
- Disconnect the Homeplug adapter from the power supply grid before cleaning. Use a moist towel to clean the device. Never use water, paint thinner, benzene, alcohol or other strong cleaning agents when cleaning the device, as these could damage the case.
- Never use the Homeplug adapter with a power supply that does not meet the specifications provided on the rating plate. If you do not know what type of power supply you have at home, contact your dealer or energy supplier.
- In the event of damage, disconnect the Homeplug adapter from the power supply grid and contact customer service. This applies, for example
    - if the power cable or plug is damaged
    - liquid has been spilled on the Homeplug adapter or objects have fallen into the device.
    - the Homeplug adapter has been exposed to rain or water.
    - the Homeplug adapter does not work, even though the operating instructions have been followed properly.
    - the Homeplug adapter’s case is damaged.

2. CE Conformity

This product complies with the technical requirements of the 1999/5/EC Directive (R&TTE) and 2006/95/EC (LVD), and it is designed for use in the EU and Switzerland.
The product is class II equipment. This equipment may cause interference with radio waves in home use; if this occurs the operator may be required to take corrective action.

3. Introduction

In this chapter, we will provide an overview of the Homeplug technology and introduce it briefly.

3.1 What exactly is Homeplug?

Homeplug is home and office networking using the electric wiring already installed in the building.

Cost factor and transmission quality

Homeplug is an economical and easy-to-use networking technology. You don't need to lay cables and you can connect to the home network at every power point.
The Homeplug standard modulates and demodulates additional frequencies on the power lines. Modulation and demodulation is a well-known and proven method of data transmission, which has been in use in other applications for a number of years. Now it is used to set up Internet and network accesses in the home or office. Depending on the damping factor, distances of at least 200 meters can be covered.
With a maximum data rate up to 500 Mbps and symmetrical upload and download speeds, Homeplug is comparable to traditional Ethernet network solutions.

Data security and radiation

128-bit AES encryption is used, which guarantees secure data transfer within the network.

3.2 The packages contains

- A Master and Slave Homeplug
- A CD containing manuals and utility
- A quick installation guide
- Two CAT 5e Ethernet cables (1.5 meter)

3.3 About this manual

The images in this manual are based on the LN-515 Homeplug, but are also applicable to the other models. In case it is not applicable this will be clearly noticed.

4. Introduction of the hardware

4.1 LN-505/LN-515

Power indication

Indicates an active connection and data transfer between Homeplugs

Indicates an active connection and data transfer between the Homeplug and connected device

Reset button. Press and hold for 20 seconds to reset to factory defaults
Security button. See chapter 8.

4.2 LN-506/LN-516

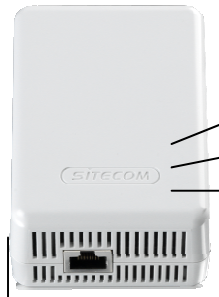
Power indication

Indicates an active connection and data transfer between Homeplugs

Indicates an active connection and data transfer between the Homeplug and connected device

Reset button. Press and hold for 3-5 seconds to reset to factory defaults
NMK button. See chapter 8.

4.3 LN-507/LN-517



Power indication

Indicates an active connection and data transfer between Homeplugs

Indicates an active connection and data transfer between the Homeplug and connected device

Reset button. Press and hold for 3-5 seconds to reset to factory defaults
NMK button. See chapter 8.

4.4 LN-508/LN-518

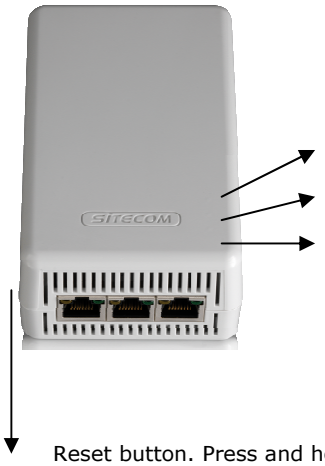
Power indication

Indicates an active connection and data transfer between Homeplugs

Indicates an active connection and data transfer between the Homeplug and connected device

Reset button. Press and hold for 3-5 seconds to reset to factory defaults
NMK button. See chapter 8.

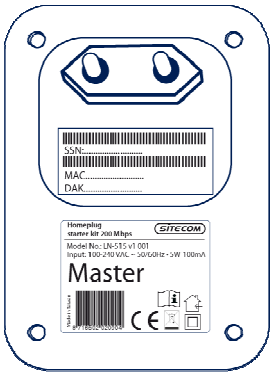
4.5 LN-509


Power indication
Indicates an active connection and data transfer between Homeplugs
Indicates an active connection and data transfer between the Homeplug and connected device
Reset button. Press and hold for 3-5 seconds to reset to factory defaults
NMK button. See chapter 8.

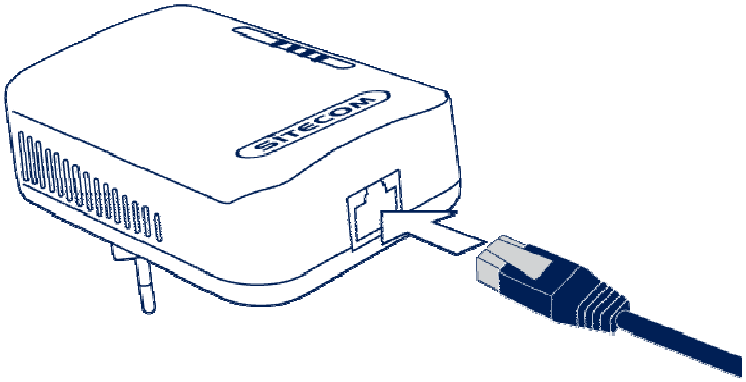
5. Install the hardware

5.1 Install the Master Homeplug

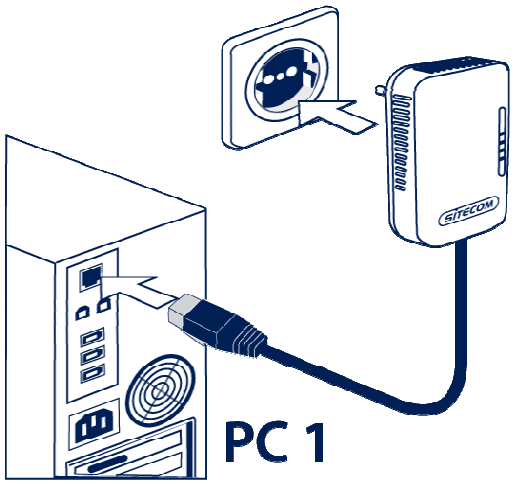
Start with the Homeplug which is labeled as 'Master'. You'll see this on the backside of the Homeplug.



Plug the Ethernet cable in the Ethernet port on the master Homeplug.



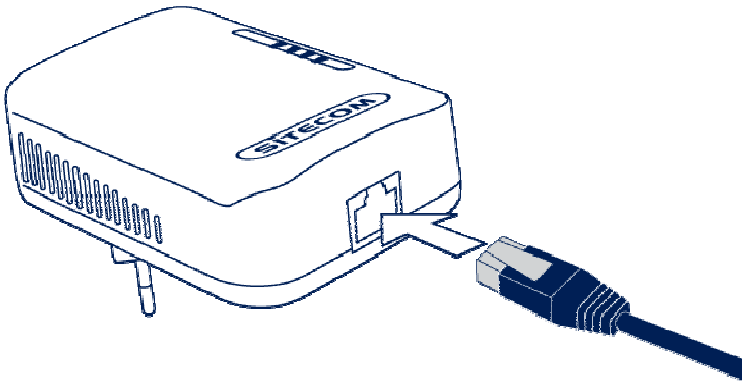
Connect the master Homeplug to your computer and plug it into the socket.



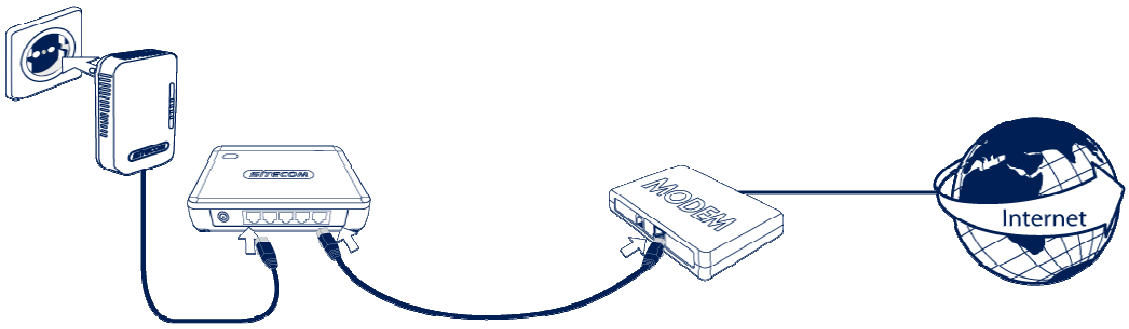
5.2 Install the Slave Homeplug

Take the Homeplug which is labeled as 'Slave'. You'll see this on the backside of the Homeplug.

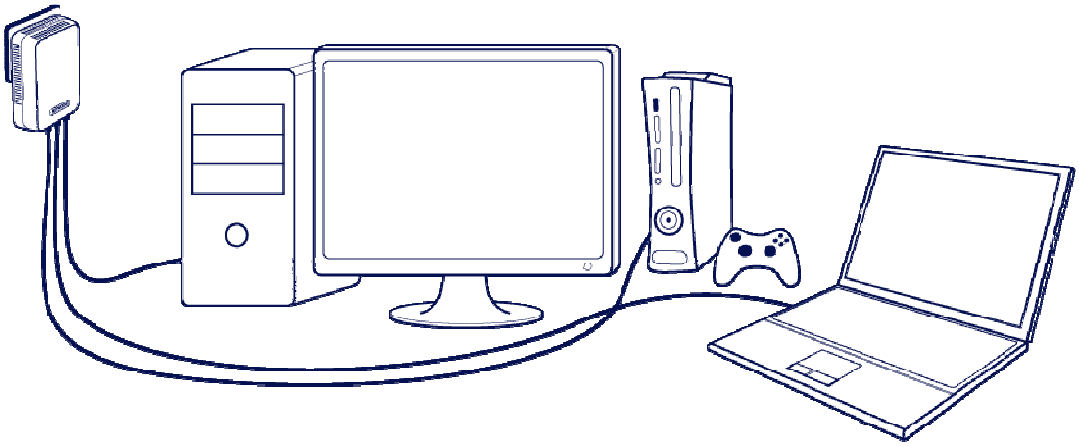
Plug the Ethernet cable in the Ethernet port on the slave Homeplug.



Connect the slave Homeplug to your Internet router and plug it into the socket.



With the LN-509 you have the possibility to connect 3 devices simultaneously.

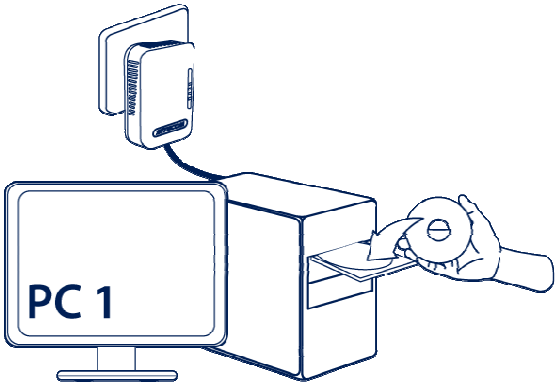


Your network is now fully functional. Follow the next steps to secure your network.

Install the software

Note: If you use this manual to add a single Homeplug to an already existing Homeplug network, please follow the steps as described in Appendix A.

Install the software only on the PC which is connected to the Master Homeplug. Insert the CD in the computer.

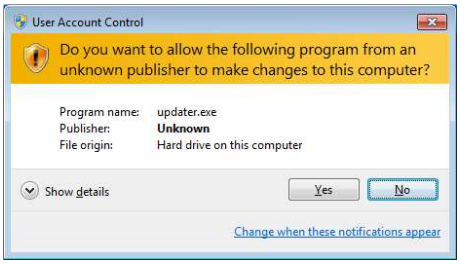


Windows 7/Vista will prompt you to run CDMenu4.exe.

AutoPlay
DVD RW Drive (H:) SITECOM
Always do this for software and games:
Install or run program from your media
Run CDMenu4.exe
Published by Sitecom Europe BV
General options
Open folder to view files
using Windows Explorer
View more AutoPlay options in Control Panel

The CD menu will start choose 'Install utility'.

Windows Vista/7 will ask permission to start the installation which looks similar to this image.


User Account Control
Do you want to allow the following program from an unknown publisher to make changes to this computer?
Program name: updater.exe
Publisher: Unknown
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

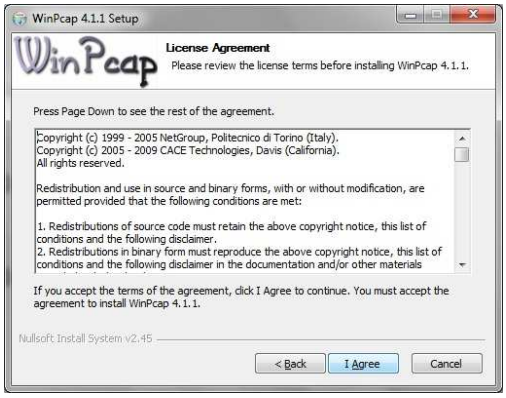
Choose your language for installation.

The WinPcap Installer will start, click Next.

Click Next.

WinPcap 4.1.1 Setup
Welcome to the WinPcap 4.1.1 Setup Wizard
This Wizard will guide you through the entire WinPcap installation.
For more information or support, please visit the WinPcap home page.
http://www.winpcap.org
< Back
Next >
Cancel

Click, I agree.


WinPcap 4.1.1 Setup
License Agreement
Please review the license terms before installing WinPcap 4.1.1.
Press Page Down to see the rest of the agreement.
Copyright (c) 1999 - 2005 NetGroup, Politecnico di Torino (Italy).
Copyright (c) 2005 - 2009 CACE Technologies, Davis (California).
All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install WinPcap 4.1.1.
Nullsoft Install System v2.45
< Back
I Agree
Cancel

Click Install.

WinPcap 4.1.1 Setup
Installation options
Please review the following options before installing WinPcap 4.1.1
Automatically start the WinPcap driver at boot time
System Information
Operating system detected on registry: Windows 7 - AMD64
True operating system (kernel.dll): Windows 7 - AMD64
npptools.dll present on the system: false
netnm.inf present on the system: false
nmnt.sys present on the system: false
Nullsoft Install System v2.45
< Back
Install
Cancel

Click Finish.

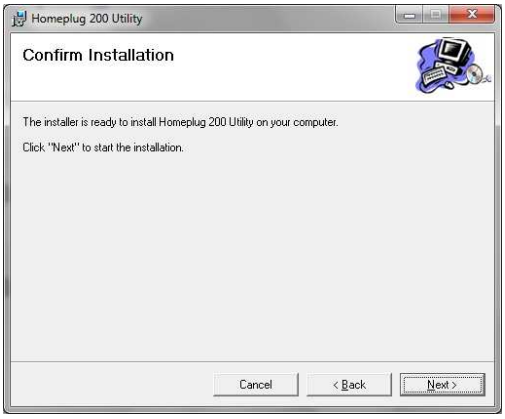
The Homeplug Utility setup will start, click Next.

Homeplug 200 Utility
Welcome to the Homeplug 200 Utility Setup Wizard
The installer will guide you through the steps required to install Homeplug 200 Utility on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

Choose an installation folder or keep the default folder (recommended) and click Next.

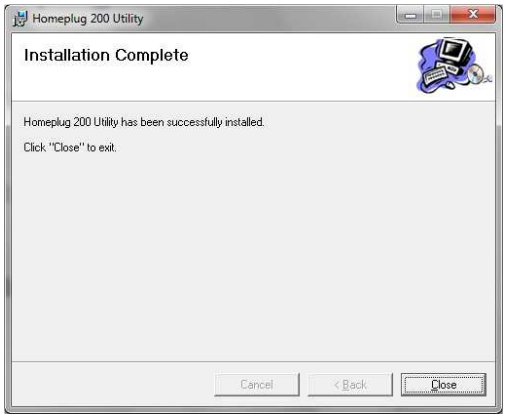
Homeplug 200 Utility
Select Installation Folder
The installer will install Homeplug 200 Utility to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files (x86)\Sitecom\Homeplug 200 Utility\
Browse...
Disk Cost...
Install Homeplug 200 Utility for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

Click Next.


Homeplug 200 Utility
Confirm Installation
The installer is ready to install Homeplug 200 Utility on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

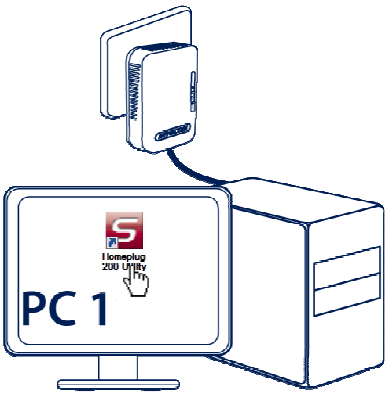
The software will be installed on your computer.

Click Close to finish the installation.

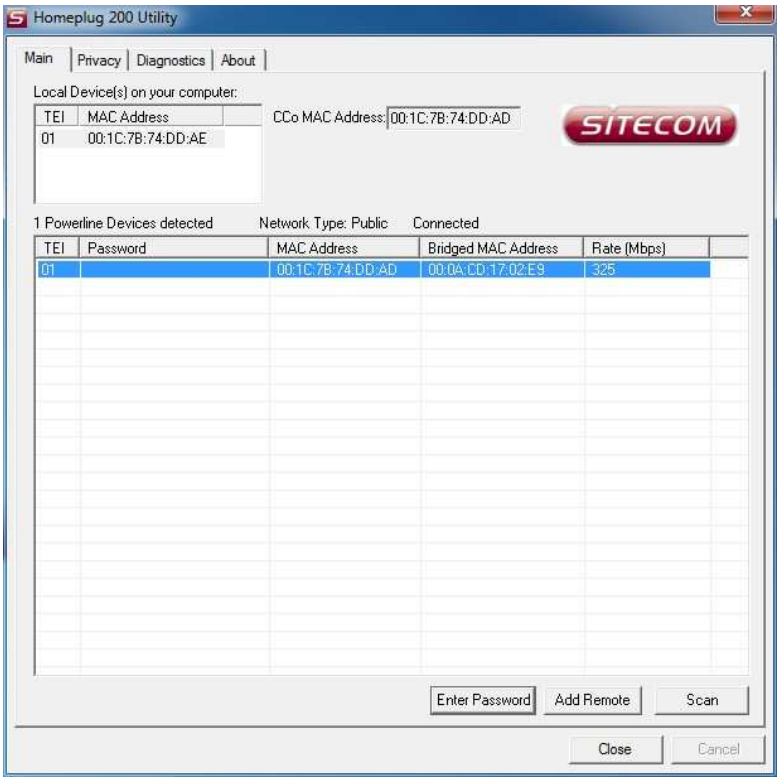


6. Configure the network

Start the software on the PC connected to the Master Homeplug by double clicking the Sitecom icon.



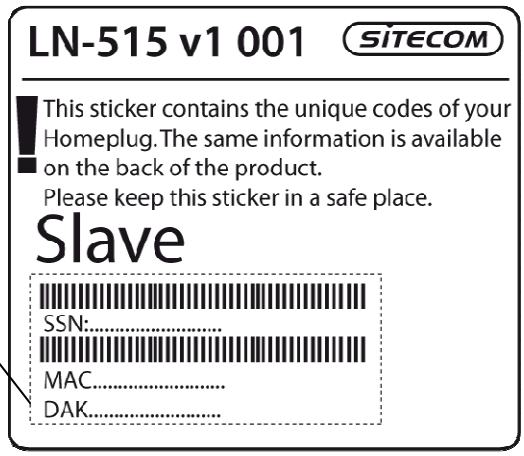
Select the Homeplug in the 'Powerline devices detected' list and click 'Enter Password'.



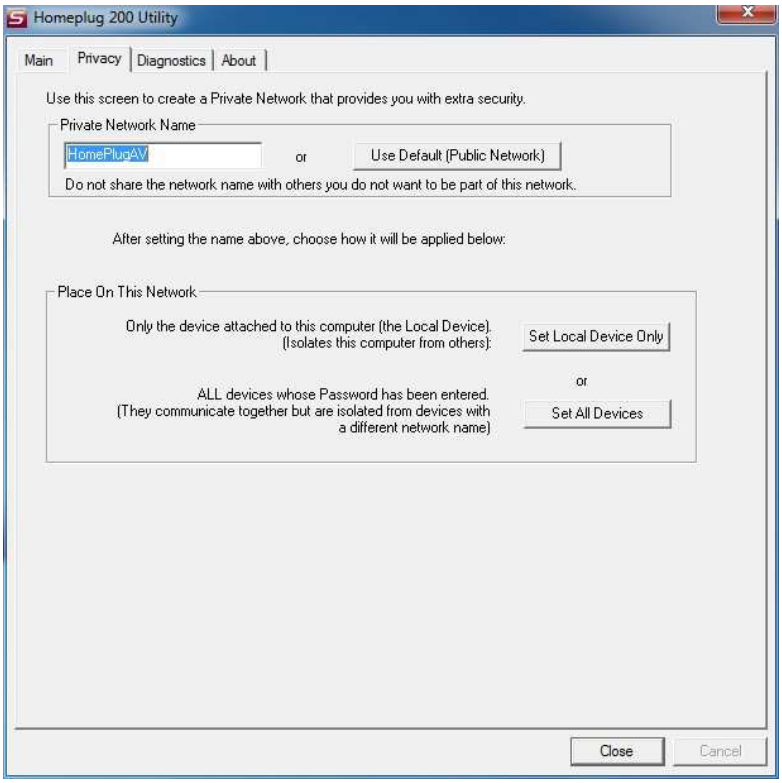
A popup window appears. Please fill in the DAK code from the slave label in the password field and click 'OK'.

NOTE: the DAK code is case sensitive

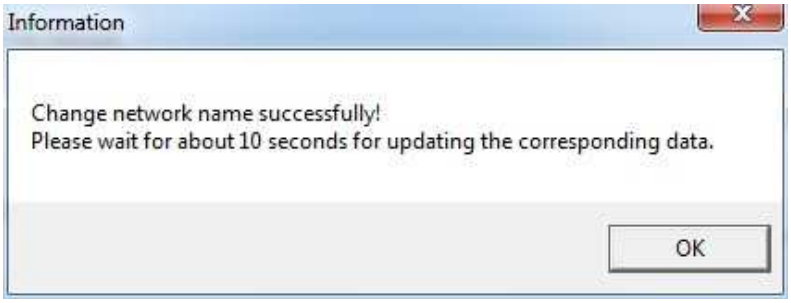
Set Device Password
TEI: 01
MAC Address: 00:1C:7B:74:DD:AD
Password:
The Password typically appears as a number and letter code, in groups of four, separated by dashes.
(ie XK8Y-GH26-BR1K-LZSA)
It is found on the device or packaging.
OK
Cancel


LN-515 v1 001
SITECOM
This sticker contains the unique codes of your Homeplug. The same information is available on the back of the product.
Please keep this sticker in a safe place.
Slave
SSN:.....
MAC.....
DAK.....

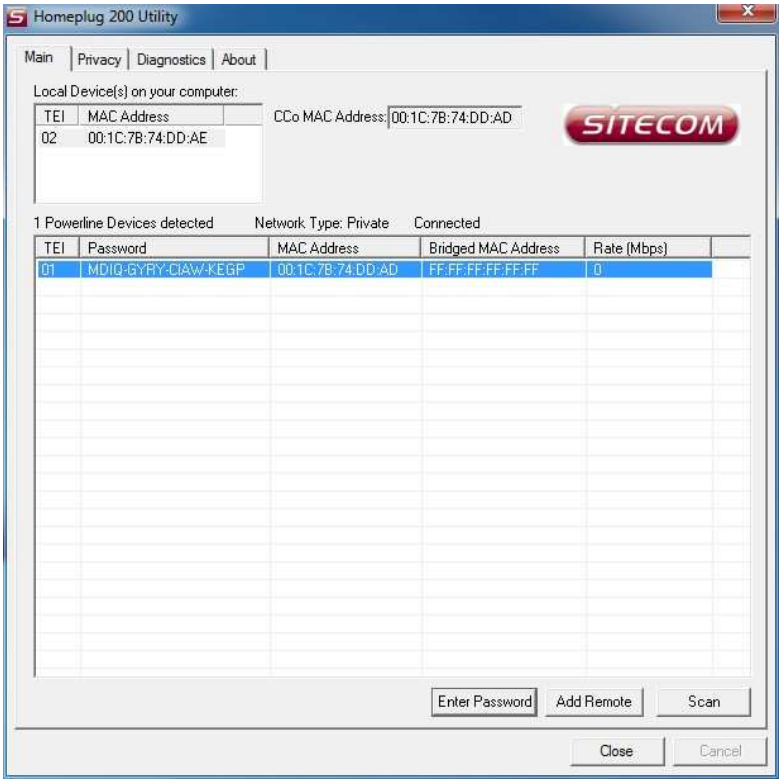
Select the 'Privacy' tab in the Homeplug utility. Fill in a chosen network name in the 'Private Network Name' field. Click 'Set all devices'.


Homeplug 200 Utility
Main
Privacy
Diagnostics
About
Use this screen to create a Private Network that provides you with extra security.
Private Network Name
HomePlugAV
or
Use Default (Public Network)
Do not share the network name with others you do not want to be part of this network.
After setting the name above, choose how it will be applied below:
Place On This Network
Only the device attached to this computer (the Local Device). (Isolates this computer from others):
Set Local Device Only
or
ALL devices whose Password has been entered. (They communicate together but are isolated from devices with a different network name)
Set All Devices
Close
Cancel

A popup appears to inform you the network name has been changed.


Information
Change network name successfully!
Please wait for about 10 seconds for updating the corresponding data.
OK

Your network type now has changed to ‘private’. Click ‘Close’



7. Setting security with the push button method

Instead of using the utility, you might also set security via the 'Security' (LN-505/515) or 'NMK' (LN-506/507/508/516/517/518/509) button on the Homeplug. This method is not recommended. We strongly advise you to use the supplied software to secure your network.

8.1 Create a network

1. Press the pushbutton on the '**Master**' for 5~8 seconds.
2. Within 1 minute, press the pushbutton on the '**Slave**' for 5~8 seconds.
3. Wait for the connection to complete.

8.2 Add an extra Homeplug

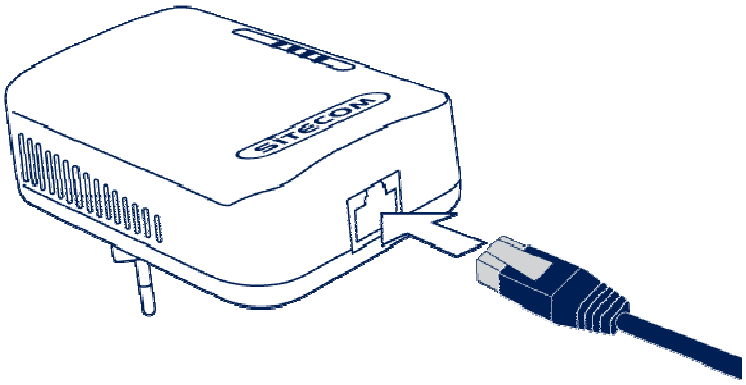
If you have 2 Sitecom Homeplugs in an already secured network and you want a new device ("**Slave**") to join the network, please following these steps below:

1. Press the pushbutton on the '**Slave**' for 5~8 seconds.
2. Within 1 minute, press the pushbutton on any network device for 5~8 seconds, making it the '**Master**'.
3. Wait for the connection to complete.

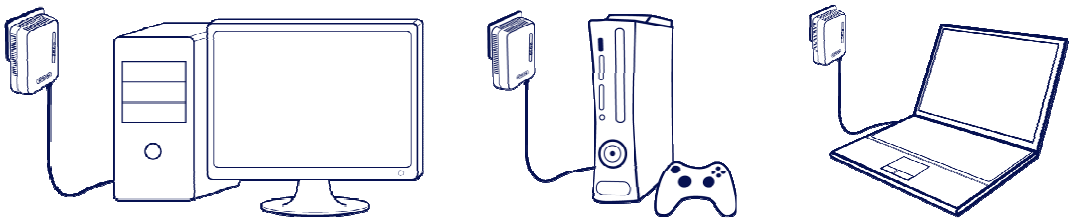
Appendix A: Add an extra Homeplug to an existing network

1. Install the Hardware

Plug the Ethernet cable in the Ethernet port.



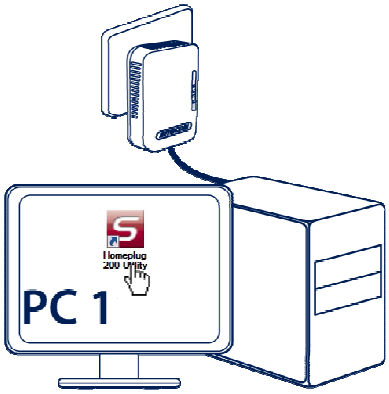
Plug the cable into the device you want to connect to your network.



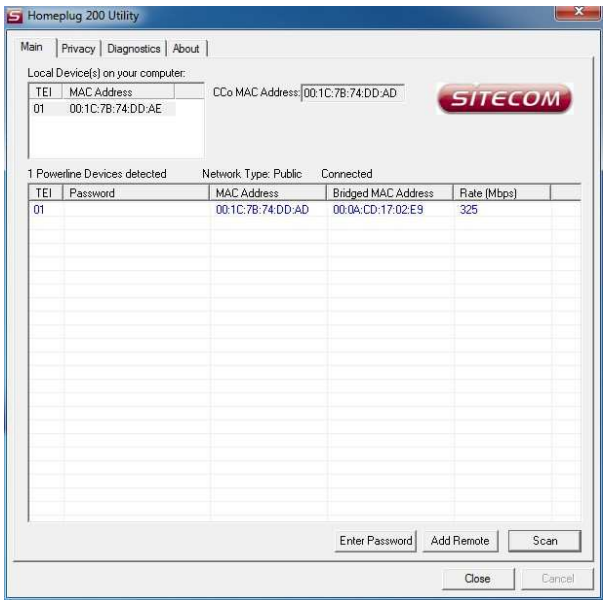
Your network is now fully functional. Follow the next steps to secure your network.

2. Add a Slave Homeplug to a secured network

Start the software on the PC connected to the Master Homeplug.



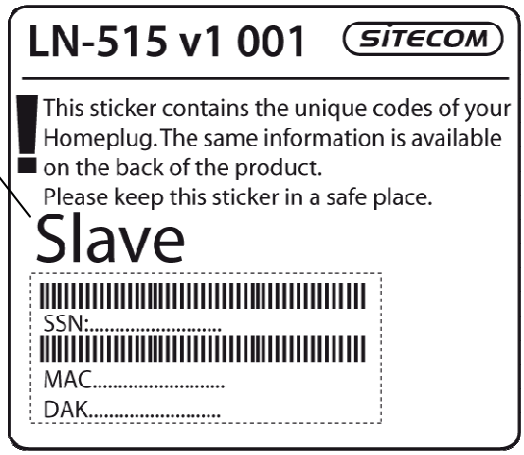
Click 'Add remote'



A popup window appears. Please fill in the DAK code from the slave label in the password field and click 'OK'.

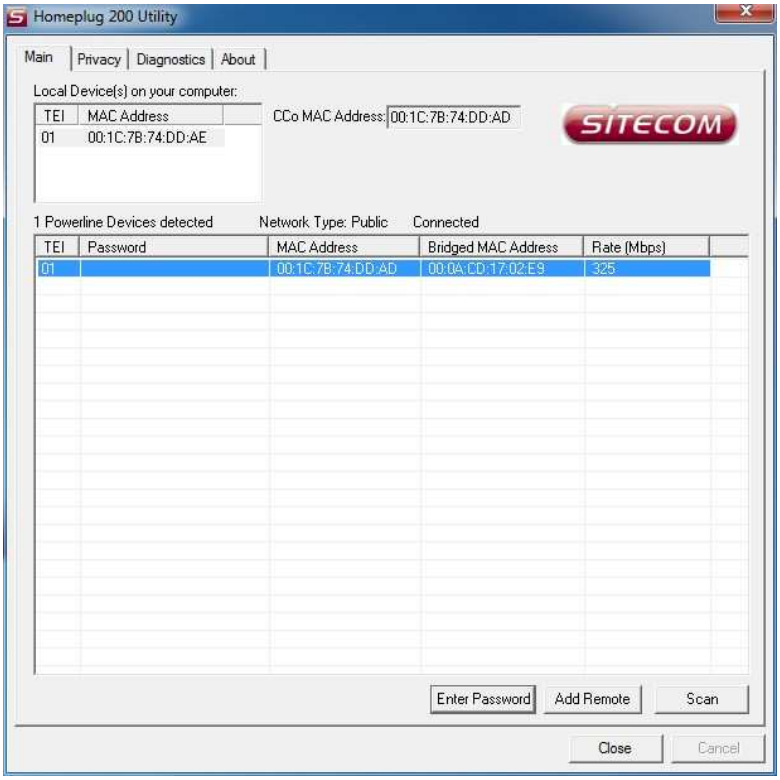
NOTE: the DAK code is case sensitive

Fill in the password from your existing network. If you do not remember this password you can find it under the privacy tab.


LN-515 v1 001
SITECOM
This sticker contains the unique codes of your Homeplug. The same information is available on the back of the product.
Please keep this sticker in a safe place.
Slave
SSN:.....
MAC.....
DAK.....

3. Configure your secured network

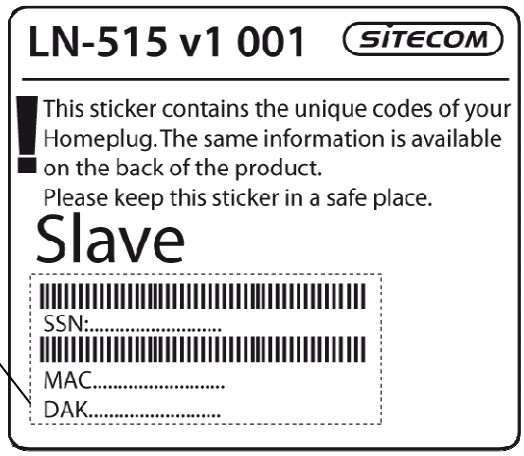
Select the Homeplug you have added in the previous step from the 'Powerline devices detected' list and click 'Enter Password'.



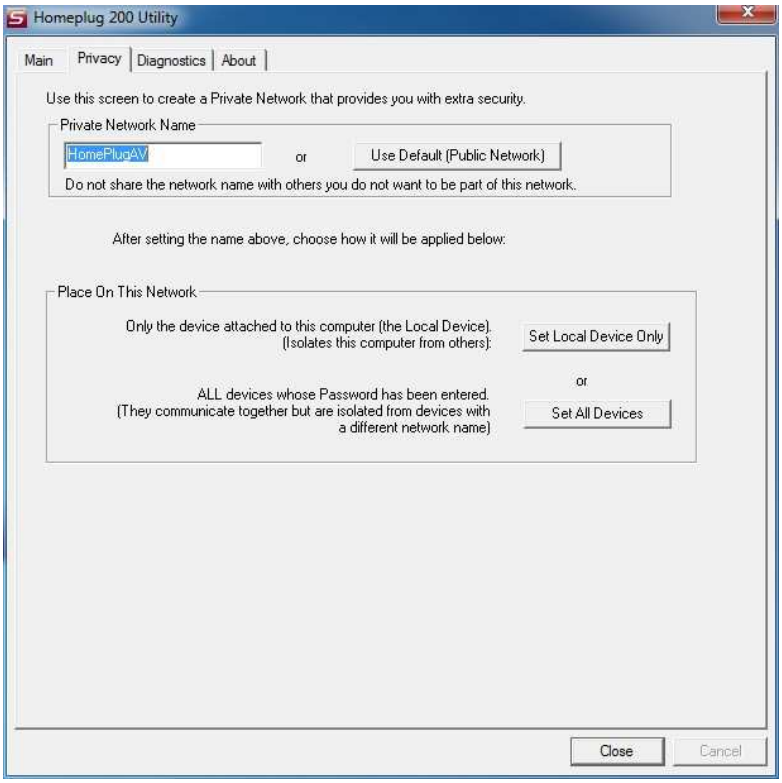
A popup window appears. Please fill in the DAK code from the slave label in the password field and click 'OK'.

NOTE: the DAK code is case sensitive

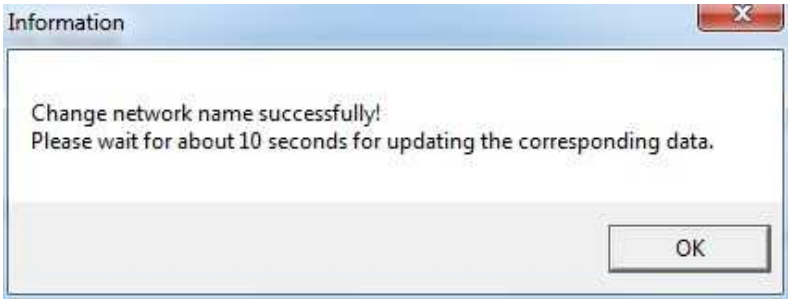
Set Device Password
TEI: 01
MAC Address: 00:1C:7B:74:DD:AD
Password:
The Password typically appears as a number and letter code, in groups of four, separated by dashes.
(ie XK8Y-GH26-BR1K-LZSA)
It is found on the device or packaging.
OK
Cancel


LN-515 v1 001
SITECOM
This sticker contains the unique codes of your Homeplug. The same information is available on the back of the product.
Please keep this sticker in a safe place.
Slave
SSN:.....
MAC.....
DAK.....

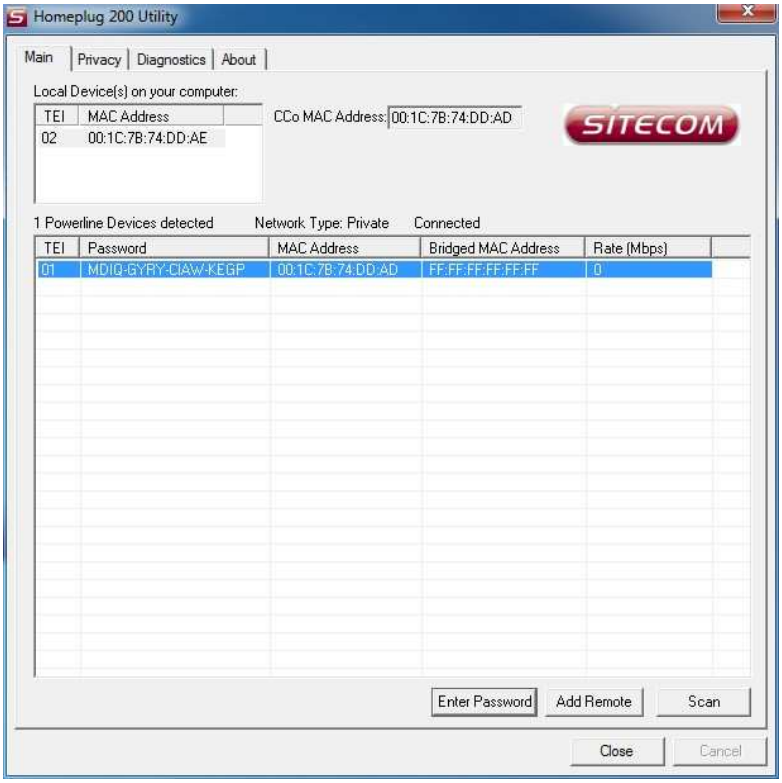
Select the 'Privacy' tab in the Homeplug utility. Fill in a chosen network name in the 'Private Network Name' field. Click 'Set all devices'.


Homeplug 200 Utility
Main
Privacy
Diagnostics
About
Use this screen to create a Private Network that provides you with extra security.
Private Network Name
HomePlugAV
or
Use Default (Public Network)
Do not share the network name with others you do not want to be part of this network.
After setting the name above, choose how it will be applied below:
Place On This Network
Only the device attached to this computer (the Local Device). (Isolates this computer from others):
Set Local Device Only
or
ALL devices whose Password has been entered. (They communicate together but are isolated from devices with a different network name)
Set All Devices
Close
Cancel

A popup appears to inform you the network name has been changed.


Information
Change network name successfully!
Please wait for about 10 seconds for updating the corresponding data.
OK

Your network type now has changed to 'private'. Click 'Close'



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Note: All the information contained in this manual was correct at the time of publication.
However, as our engineers are always updating and improving the product, your device may have a slightly different appearance or modified functionality than presented in this manual.